

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Original) An external storage device for a personal video recorder (PVR) or television Set-Top Box (STB), comprising:

means for receiving an encrypted and filtered MPEG transport stream, the filtered MPEG transport stream containing only components having content related to a single program;

a decrypter that decrypts the encrypted and filtered MPEG transport stream to produce a filtered MPEG transport stream;

a demultiplexer that receives the filtered MPEG transport stream and extracts an MPEG table therefrom;

a formatter that reinserts an MPEG table back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted table containing only information relevant to the single program; and

a disc drive that stores the modified MPEG transport stream.

2. (Original) The apparatus according to claim 1, further comprising an encrypter that encrypts the modified transport stream.

3. (Original) The apparatus according to claim 2, wherein the encrypter encrypts the modified transport stream prior to storage in the disc drive so that the disc drive stores an encrypted version of the modified transport stream.

4. (Currently Amended) The apparatus according to claim 2, wherein the encrypter encrypts the modified MPEG transport stream using 5C encryption ~~decryption~~.

5. (Currently Amended) The apparatus according to claim 3, wherein the encrypter encrypts the modified MPEG transport stream using 5C encryption ~~decryption~~.

Serial No.: 09/883,633

-2-

6. (Original) The apparatus according to claim 1, wherein the MPEG table comprises at least one of a program association table (PAT) and a program map table (PMT).

7. (Original) The apparatus according to claim 1, wherein the demultiplexer extracts MPEG tables comprising a program association table (PAT) and a program map table (PMT); and wherein the formatter reinserts the MPEG PAT and PMT tables back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted tables containing only information relevant to the single program.

8. (Original) The apparatus according to claim 1, wherein the demultiplexer further extracts an entitlement control message (ECM) from the filtered transport stream.

9. (Original) The apparatus according to claim 1, wherein the means for receiving an encrypted and filtered MPEG transport stream receives the encrypted and filtered MPEG transport stream over an IEEE 1394 bus.

10. (Original) The apparatus according to claim 9, wherein the encrypted and filtered MPEG transport stream is received as isochronous data over the IEEE 1394 bus.

11. (Original) The apparatus according to claim 1, wherein the MPEG table extracted by the demultiplexer is sent over an IEEE 1394 bus.

12. (Original) The apparatus according to claim 11, wherein the MPEG table extracted by the demultiplexer is sent as asynchronous data over the IEEE 1394 bus.

13. (Original) The apparatus according to claim 1, wherein the formatter receives the MPEG table to be reinserted over an IEEE 1394 bus.

Serial No.: 09/883,633

-3-

14. (Original) The apparatus according to claim 13, wherein the formatter receives the MPEG table to be reinserted as asynchronous data over the IEEE 1394 bus.

15. (Original) The apparatus according to claim 1, further comprising a pass through switch for selectively bypassing the disc drive.

16. (Original) An adapter for adapting an external storage device for storing information from a personal video recorder (PVR) or television Set-Top Box (STB), comprising:

means for receiving an encrypted and filtered MPEG transport stream, the filtered MPEG transport stream containing only components having content related to a single program;

a decrypter that decrypts the encrypted and filtered MPEG transport stream to produce a filtered MPEG transport stream;

a demultiplexer that receives the filtered MPEG transport stream and extracts an MPEG table therefrom;

a formatter that reinserts an MPEG table back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted table containing only information relevant to the single program; and

means for coupling the modified MPEG transport stream to a disc drive.

17. (Original) The apparatus according to claim 16, further comprising an encrypter and wherein the encrypter encrypts the modified transport stream before coupling to the disc drive so that the disc drive stores an encrypted version of the modified transport stream.

18. (Currently Amended) The apparatus according to claim 17, wherein the encrypter encrypts the modified MPEG transport stream using 5C encryption ~~decryption~~.

19. (Original) The apparatus according to claim 17, wherein the MPEG tables comprise at least one of a program association table (PAT) and a program map table (PMT).

Serial No.: 09/883,633

-4-

20. (Original) The apparatus according to claim 17, wherein the demultiplexer extracts MPEG tables comprising a program association table (PAT) and a program map table (PMT), and wherein the formatter reinserts the MPEG PAT and PMT tables back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted tables containing only information relevant to the single program.
21. (Original) The apparatus according to claim 17, wherein the demultiplexer further extracts an entitlement control message (ECM) from the filtered transport stream.
22. (Original) The apparatus according to claim 17, wherein the means for receiving an encrypted and filtered MPEG transport stream receives the encrypted and filtered MPEG transport stream over an IEEE 1394 bus from the PVR or STB.
23. (Original) The apparatus according to claim 22, wherein the encrypted and filtered MPEG transport stream is received as isochronous data over the IEEE 1394 bus.
24. (Original) The apparatus according to claim 17, wherein the MPEG table extracted by the demultiplexer is sent to the PVR or STB over an IEEE 1394 bus.
25. (Original) The apparatus according to claim 24, wherein the MPEG table extracted by the demultiplexer is sent to the PVR or STB as asynchronous data over the IEEE 1394 bus.
26. (Original) The apparatus according to claim 17, wherein the formatter receives the MPEG table to be reinserted over an IEEE 1394 bus.
27. (Original) The apparatus according to claim 26, wherein the formatter receives the MPEG table to be reinserted as asynchronous data over the IEEE 1394 bus.

Serial No.: 09/883,633

-5-

28. (Original) An external storage device for a personal video recorder (PVR) or television Set-Top Box (STB), comprising:

- means for receiving an encrypted and filtered MPEG transport stream, the filtered MPEG transport stream containing only components having content related to a single program, wherein the encrypted and filtered MPEG transport stream is received as isochronous data over an IEEE 1394 bus;

- a decrypter that decrypts the encrypted and filtered MPEG transport stream using 5C decryption to produce a filtered MPEG transport stream;

- a demultiplexer that receives the filtered MPEG transport stream and extracts MPEG tables comprising a program association table (PAT) and a program map table (PMT) therefrom, and wherein the demultiplexer further extracts an entitlement control message (ECM) from the filtered transport stream;

- means for sending the MPEG tables extracted by the demultiplexer is sent to the PVR or STB over the IEEE 1394 bus as asynchronous data;

- a formatter that reinserts the MPEG PAT and PMT tables back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted tables containing only information relevant to the single program, wherein the formatter receives the MPEG table to be reinserted as asynchronous data over the IEEE 1394 bus;

- an encrypter that encrypts the modified transport stream using 5C encryption;

- a disc drive that stores the encrypted modified MPEG transport stream; and

- a pass through switch for selectively bypassing the disc drive.

29. (Original) A method of storing data on a disc drive external to a personal video recorder (PVR) or television Set-Top Box (STB), comprising:

- receiving an MPEG transport stream;

- filtering the MPEG transport stream to extract portions of the MPEG transport stream relevant to a selected program;

- encrypting the filtered MPEG transport stream;

- sending the MPEG transport stream to the external disc drive;

Serial No.: 09/883,633

at the external disc drive, decrypting the filtered MPEG transport stream;
removing an MPEG table from the filtered MPEG transport stream;
editing the MPEG table to remove information not relevant to the selected program;
reinserting the edited table into the filtered MPEG transport stream to produce a modified
MPEG transport stream; and
storing the modified MPEG transport stream to the disc drive.

30. (Original) The method according to claim 29, further comprising encrypting the modified transport stream.

31. (Original) The method according to claim 30, wherein the encrypting is prior to the storing in the disc drive so that the disc drive stores an encrypted version of the modified transport stream.

32. (Original) The method according to claim 30, wherein the encrypting comprises 5C encrypting.

33. (Original) The method according to claim 29, wherein the MPEG table comprises at least one of a program association table (PAT) and a program map table (PMT).

34. (Original) The method according to claim 29, wherein the removing comprises extracting MPEG tables comprising a program association table (PAT) and a program map table (PMT); and wherein the reinserting comprises reinserting the MPEG PAT and PMT tables back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted tables containing only information relevant to the single program.

35. (Original) The method according to claim 29, further comprising extracting an entitlement control message (ECM) from the filtered transport stream and sending the ECM to the PVR or STB.

Serial No.: 09/883,633

-7-

36. (Original) The method according to claim 29, wherein the encrypted and filtered MPEG transport stream is sent over an IEEE 1394 bus from the PVR or STB.

37. (Original) The method according to claim 36, wherein the encrypted and filtered MPEG transport stream is sent as isochronous data over the IEEE 1394 bus.

38. (Original) The method according to claim 29, wherein the removed MPEG table is sent to the PVR over an IEEE 1394 bus.

39. (Original) The method according to claim 38, wherein the removed MPEG table is sent to the PVR as asynchronous data over the IEEE 1394 bus.

40. (Original) The method according to claim 29 wherein the MPEG table to be reinserted is received from the PVR or STB over an IEEE 1394 bus.

41. (Original) The method according to claim 40, wherein the MPEG table to be reinserted is received as asynchronous data over the IEEE 1394 bus.

42. (Original) A method of storing data on a disc drive external to a personal video recorder (PVR) or television Set-Top Box (STB), comprising:

receiving an encrypted and filtered MPEG transport stream;

decrypting the filtered MPEG transport stream;

removing an MPEG table from the filtered MPEG transport stream;

sending the MPEG table to the PVR or STB;

receiving an edited table from the PVR or STB;

reinserting the edited table into the filtered MPEG transport stream to produce a modified MPEG transport stream; and

storing the modified MPEG transport stream to the disc drive.

Serial No.: 09/883,633

-8-

43. (Original) The method according to claim 42, further comprising encrypting the modified MPEG transport stream prior to the storing in the disc drive, so that the disc drive stores an encrypted version of the modified transport stream.

44. (Original) The method according to claim 43, wherein the encrypting comprises 5C encrypting.

45. (Original) The method according to claim 42, wherein the MPEG table comprises at least one of a program association table (PAT) and a program map table (PMT).

46. (Original) The method according to claim 42, wherein the removing comprises extracting MPEG tables comprising a program association table (PAT) and a program map table (PMT); and wherein the reinserting comprises reinserting the MPEG PAT and PMT tables back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted tables containing only information relevant to the single program.

47. (Original) The method according to claim 42, further comprising extracting an entitlement control message (ECM) from the filtered transport stream and sending the ECM to the PVR or STB.

48. (Original) The method according to claim 42, wherein the encrypted and filtered MPEG transport stream is sent over an IEEE 1394 bus from the PVR or STB.

49. (Original) The method according to claim 48, wherein the encrypted and filtered MPEG transport stream is sent as isochronous data over the IEEE 1394 bus.

50. (Original) The method according to claim 42, wherein the removed MPEG table is sent to the PVR over an IEEE 1394 bus.

Serial No.: 09/883,633

-9-

51. (Original) The method according to claim 50, wherein the removed MPEG table is sent to the PVR as asynchronous data over the IEEE 1394 bus.

52. (Original) The method according to claim 42 wherein the MPEG table to be reinserted is received from the PVR over an IEEE 1394 bus.

53. (Original) The method according to claim 52, wherein the MPEG table to be reinserted is received as asynchronous data over the IEEE 1394 bus.

54. (Original) A method of storing data from a Personal Video Recorder (PVR) or television Set-Top Box to an external storage device, comprising:

- filtering an MPEG transport stream to remove components that do not contain information related to a selected program;

- encrypting the MPEG transport stream to produce a filtered and encrypted MPEG transport stream;

- sending the filtered and encrypted MPEG transport stream to the external storage device;

- receiving an MPEG table from the external storage device;

- editing the MPEG table to remove information not related to the selected program; and

- sending the edited table to the external storage device.

55. (Original) The method according to claim 54, wherein the encrypting comprises 5C encrypting.

56. (Original) The method according to claim 54, wherein the MPEG table comprises at least one of a program association table (PAT) and a program map table (PMT).

57. (Original) The method according to claim 54, wherein the receiving comprises receiving MPEG tables comprising a program association table (PAT) and a program map table (PMT);

Serial No.: 09/883,633

and wherein the reinserting comprises reinserting the MPEG PAT and PMT tables back into the filtered MPEG transport stream to produce a modified MPEG transport stream, the reinserted tables containing only information relevant to the single program.

58. (Original) The method according to claim 54, further comprising receiving an entitlement control message (ECM) from the PVR or STB.

59. (Original) The method according to claim 54, wherein the encrypted and filtered MPEG transport stream is sent over an IEEE 1394 bus to the external storage device.

60. (Original) The method according to claim 59, wherein the encrypted and filtered MPEG transport stream is sent as isochronous data over the IEEE 1394 bus.

61. (Original) The method according to claim 54, wherein the MPEG table is received by the PVR or STB over an IEEE 1394 bus.

62. (Original) The method according to claim 54, wherein the MPEG table is received by the PVR or STB as asynchronous data over the IEEE 1394 bus.

63. (Original) The method according to claim 54 wherein the edited MPEG table is sent from the PVR or STB over an IEEE 1394 bus.

64. (Original) The method according to claim 63, wherein the edited MPEG table is received as asynchronous data over the IEEE 1394 bus.

65. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out a method of storing data on a disc drive external to a personal video recorder (PVR) or television Set-Top Box, comprising:

receiving an MPEG transport stream;

Serial No.: 09/883,633

-11-

filtering the MPEG transport stream to extract portions of the MPEG transport stream relevant to a selected program;

encrypting the filtered MPEG transport stream;

sending the MPEG transport stream to the external disc drive;

at the external disc drive, decrypting the filtered MPEG transport stream;

removing an MPEG table from the filtered MPEG transport stream;

editing the MPEG table to remove information not relevant to the selected program;

reinserting the edited table into the filtered MPEG transport stream to produce a modified MPEG transport stream; and

storing the modified MPEG transport stream to the disc drive.

66. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out a method of storing data on a disc drive external to a personal video recorder (PVR) or television Set-Top Box, comprising:

receiving an encrypted and filtered MPEG transport stream;

decrypting the filtered MPEG transport stream;

removing an MPEG table from the filtered MPEG transport stream;

sending the MPEG table to the PVR or STB;

receiving an edited table from the PVR or STB;

reinserting the edited table into the filtered MPEG transport stream to produce a modified MPEG transport stream; and

storing the modified MPEG transport stream to the disc drive.

67. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out a method of storing data from a Personal Video Recorder (PVR) or television Set-Top Box (STB) to an external storage device, comprising:

filtering an MPEG transport stream to remove components that do not contain information related to a selected program;

Serial No.: 09/883,633

-12-

encrypting the MPEG transport stream to produce a filtered and encrypted MPEG transport stream;

sending the filtered and encrypted MPEG transport stream to the external storage device;

receiving an MPEG table from the external storage device;

editing the MPEG table to remove information not related to the selected program; and

sending the edited table to the external storage device.

68. (Original) A digital storage device, comprising:

a disc drive;

an interface that receives an IEEE 1394 isochronous data stream containing encrypted data formatted as an MPEG transport stream into the digital storage device;

a decrypter that decrypts the encrypted data;

means for storing the data on the disc drive; and

an encrypter that encrypts the data for transport out of the digital storage device as an IEEE 1394 isochronous data stream.

69. (Original) The apparatus according to claim 68, wherein the MPEG transport stream contains only information related to a selected program.

70. (Original) The apparatus according to claim 68, wherein the encrypter encrypts the MPEG transport stream prior to storage in the disc drive so that the disc drive stores an encrypted version of the MPEG transport stream.

71. (Currently Amended) The apparatus according to claim 68, wherein the encrypter encrypts the data using 5C ~~encrvption~~ encryption.

72. (Original) The apparatus according to claim 68, wherein the decrypter decrypts the data using 5C decryption.

Serial No.: 09/883,633

73. (Original) The method according to claim 68, further comprising:

a demultiplexer that removes an MPEG table from the MPEG transport stream; and
a formatter that reinserts an MPEG table back into the MPEG transport stream to produce a modified MPEG transport stream, the reinserted table containing only information relevant to a selected program.

74. (Original) The apparatus according to claim 73, wherein the MPEG table comprises at least one of a program association table (PAT) and a program map table (PMT).

75. (Original) The apparatus according to claim 73, wherein the demultiplexer extracts MPEG tables comprising a program association table (PAT) and a program map table (PMT); and wherein the formatter reinserts the MPEG PAT and PMT tables back into the MPEG transport stream to produce the modified MPEG transport stream, the reinserted tables containing only information relevant to the selected program.

76. (Original) The apparatus according to claim 73, wherein the demultiplexer further extracts an entitlement control message (ECM) from the filtered transport stream.

77. (Original) The apparatus according to claim 73, wherein the MPEG table extracted by the demultiplexer is transmitted as asynchronous data over the IEEE 1394 bus.

78. (Original) The apparatus according to claim 73, wherein the formatter receives the MPEG table to be reinserted as asynchronous data over the IEEE 1394 bus.

79. (Original) The apparatus according to claim 68, further comprising a pass through switch for selectively bypassing the disc drive.

Serial No.: 09/883,633

-14-